

## NOTICE OF INTENT

Department of Environmental Quality  
Office of Environmental Assessment  
Environmental Planning Division

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the Hazardous Waste regulations, LAC 33:V.109, 2601, 2602, 2603, 2605, and 2607 (Log #HW081\*).

This proposed rule is identical to federal regulations found in 67 FR 2962, January 22, 2002, No. 14, which are applicable in Louisiana. For more information regarding the federal requirement, contact the Regulation Development Section at (225) 765-0399 or Box 82178, Baton Rouge, LA 70884-2178. No fiscal or economic impact will result from the proposed rule; therefore, the rule will be promulgated in accordance with R.S. 49:953.F.(3) and (4).

Corrective Action Management Units (CAMUs) are special units created under the Resource Conservation and Recovery Act (RCRA) to facilitate treatment, storage, and disposal of hazardous wastes managed for implementing cleanup, and to remove the disincentives to cleanup that the application of RCRA to these wastes can sometimes impose. The original CAMU regulations were promulgated on February 16, 1993. The state is proposing to adopt the federal amendments verbatim.

The previous LAC 33:V.2603.Temporary Units (TU) is moved to §2604. Text remains the same. In this proposed rule §2603 is now titled "Corrective Action Management Units (CAMUs)." This proposed rule amends the 1993 CAMU rule in six ways. It establishes a specific definition, distinct from the definition of remediation waste, to govern the types of wastes that are eligible for placement in CAMUs. More detailed minimum design and operating standards are established for CAMUs in which waste will remain after closure, with opportunities for the administrative authority of an authorized state to approve alternate design standards under certain circumstances. Treatment requirements are established for wastes that are placed in CAMUs, including minimum treatment standards, with opportunities to adjust treatment requirements under certain circumstances. More specific information is required for CAMU applications, and there shall be public notice and a reasonable opportunity for public comment before final CAMU determinations are made. New requirements are established for CAMUs that will be used only for treatment and storage. Certain types of existing CAMUs will be "grandfathered" and allowed to continue to operate under the 1993 rule. The proposed rule also amends the regulations for "staging piles" to expressly allow for mixing, blending, and other similar physical operations intended to prepare wastes for subsequent management or treatment. It also adds a new provision allowing off-site placement of hazardous CAMU-eligible waste in hazardous waste landfills, if the waste is treated to meet CAMU treatment standards (somewhat modified). The basis and rationale for this rule are to mirror the federal regulations and to maintain state and federal equivalency in the RCRA program.

This proposed rule meets an exception listed in R.S. 30:2019.D.(2) and R.S. 49:953.G.(3); therefore, no report regarding environmental/health benefits and social/economic costs is required. This proposed rule has no known impact on family formation, stability, and autonomy as described in R.S. 49:972.

A public hearing will be held on May 28, 2002, at 1:30 p.m. in the Maynard Ketcham Building, Room 326, 7290 Bluebonnet Boulevard, Baton Rouge, LA 70810. Interested persons are invited to attend and submit oral comments on the proposed amendments. Attendees should report directly to the hearing location for DEQ visitor registration, instead of to the security desk in the DEQ Headquarters building. Should individuals with a disability need an accommodation in order to participate, contact Patsy Deaville at the address given below or at (225) 765-0399.

All interested persons are invited to submit written comments on the proposed regulations. Persons commenting should reference this proposed regulation by HW081\*. Such comments must be received no later than May 28, 2002, at 4:30 p.m., and should be sent to Patsy Deaville, Regulation Development Section, Box 82178, Baton Rouge, LA 70884-2178 or to FAX (225) 765-0389 or by e-mail to [patsyd@deq.state.la.us](mailto:patsyd@deq.state.la.us). The comment period for this rule ends on the same date as the public hearing. Copies of this proposed regulation can be purchased at the above referenced address. Contact the Regulation Development Section at (225) 765-0399 for pricing information. Check or money order is required in advance for each copy of HW081\*.

This proposed regulation is available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 7290 Bluebonnet Boulevard, Fourth Floor, Baton Rouge, LA 70810; 804 Thirty-first Street, Monroe, LA 71203; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 3519 Patrick Street, Lake Charles, LA 70605; 201 Evans Road, Building 4, Suite 420, New Orleans, LA 70123; 100 Asma Boulevard, Suite 151, Lafayette, LA 70508; 104 Lococo Drive, Raceland, LA 70394 or on the Internet at <http://www.deq.state.la.us/planning/regs/index.htm>.

James H. Brent, Ph.D.  
Assistant Secretary

**Title 33**  
**ENVIRONMENTAL QUALITY**  
**Part V. Hazardous Waste and Hazardous Materials**  
**Subpart 1. Department of Environmental Quality—Hazardous Waste**  
**Chapter 1. General Provisions and Definitions**

**§109. Definitions**

For all purposes of these rules and regulations, the terms defined in this Chapter shall have the following meanings, unless the context of use clearly indicates otherwise:

\* \* \*

*Corrective Action Management Unit (CAMU)*—~~an area within a facility that is used only for managing remediation wastes for implementing corrective action or cleanup at the facility.~~  
Repealed.

\* \* \*

*Remediation Waste*—all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris that ~~contain listed hazardous wastes or that themselves exhibit a hazardous waste characteristic and~~ are managed for implementing cleanup.

\* \* \*

**AUTHORITY NOTE:** Promulgated in accordance with R.S. 30:2180 et seq.

**HISTORICAL NOTE:** Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790 (November 1988), LR 15:378 (May 1989), LR 15:737 (September 1989), LR 16:47 (January 1990), LR 16:218 (March 1990), LR 16:220 (March 1990), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 16:683 (August 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 18:1375 (December 1992), repromulgated by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 19:626 (May 1993), amended by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:814 (September 1996), LR 23:564 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:655 (April 1998), LR 24:1101 (June 1998), LR 24:1688 (September 1998), LR 25:433 (March 1999), repromulgated LR 25:853 (May 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:269 (February 2000),

amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:269 (February 2000), LR 26:2465 (November 2000), LR 27:291 (March 2001), LR 27:708 (May 2001), LR 28:\*\*.

## **Chapter 26. Corrective Action Management Units and Temporary Units** **Special Provisions for Cleanup**

### **§2601. Corrective Action Management Units (CAMU) Applicability of Corrective Action Management Unit (CAMU) Regulations**

A. ~~—To implement remedies under LAC 33:V.3322 or RCRA section 3008(h), or to implement remedies at a permitted facility that is not subject to LAC 33:V.3322, the administrative authority may designate an area at a facility as a corrective action management unit, as defined in LAC 33:V.109, under the requirements of this Section. A CAMU must be located within the contiguous property under the control of the owner/operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.~~

1. ~~—Placement of remediation wastes into or within a CAMU does not constitute land disposal of hazardous wastes.~~

2. ~~—Consolidation or placement of remediation wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.~~

B. ~~—Designation of a Regulated Unit as a CAMU or Incorporation of Regulated Units into a CAMU~~

1. ~~—The administrative authority may designate a regulated unit (as defined in LAC 33:V.3301.A) as a CAMU or may incorporate a regulated unit into a CAMU, if:~~

a. ~~—the regulated unit is closed or closing, meaning it has begun the closure process under LAC 33:V.3513 or 4383; and~~

b. ~~—inclusion of the regulated unit will enhance implementation of effective, protective, and reliable remedial actions for the facility.~~

2. ~~—The LAC 33:V.Chapters 33, 35, 37, and the unit specific requirements of Chapter 43 will continue to apply to that same portion of the CAMU after incorporation into the CAMU.~~

C. ~~—The administrative authority shall designate a CAMU in accordance with the following:~~

1. ~~—the CAMU shall facilitate the implementation of reliable, effective, protective, and cost effective remedies;~~

2. ~~—waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;~~

3. ~~—the CAMU shall include uncontaminated areas of the facility only if including such areas for the purpose of managing remediation waste is more protective than management of such wastes at contaminated areas of the facility;~~

4. ~~\_\_\_\_\_~~ areas within the CAMU where wastes remain in place after closure of the CAMU shall be managed and contained so as to minimize future releases to the extent practicable;

5. ~~\_\_\_\_\_~~ the CAMU shall expedite the timing of remedial activity implementation when appropriate and practicable;

6. ~~\_\_\_\_\_~~ the CAMU shall enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

7. ~~\_\_\_\_\_~~ the CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

D. ~~\_\_\_\_\_~~ The owner/operator shall provide sufficient information to enable the administrative authority to designate a CAMU in accordance with the criteria in LAC 33:V.2601.

E. ~~\_\_\_\_\_~~ The administrative authority shall specify in the permit or order requirements for CAMUs to include the following:

1. ~~\_\_\_\_\_~~ the areal configuration of the CAMU;

2. ~~\_\_\_\_\_~~ requirements for remediation waste management to include the specification of applicable design, operation, and closure requirements;

3. ~~\_\_\_\_\_~~ requirements for groundwater monitoring that are sufficient to:

a. ~~\_\_\_\_\_~~ continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in groundwater from sources located within the CAMU; and

b. ~~\_\_\_\_\_~~ detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU;

4. ~~\_\_\_\_\_~~ Closure and Post-closure Requirements

a. ~~\_\_\_\_\_~~ closure of corrective action management units shall:

i. ~~\_\_\_\_\_~~ minimize the need for further maintenance; and

ii. ~~\_\_\_\_\_~~ control, minimize, or eliminate to the extent necessary to protect human health and the environment for areas where wastes remain in place, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere;

b. ~~\_\_\_\_\_~~ requirements for closure of CAMUs shall include the following, as appropriate and as deemed necessary by the administrative authority for a given CAMU:

i. ~~\_\_\_\_\_~~ excavation, removal, treatment, or containment of wastes;

ii. ~~\_\_\_\_\_~~ capping of areas where wastes will remain after closure of the CAMU; and

iii. ~~\_\_\_\_\_~~ removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU;

c. ~~\_\_\_\_\_~~ in establishing specific closure requirements for CAMUs under LAC 33:V.2601.E, the administrative authority shall consider the following factors:

i. ~~\_\_\_\_\_~~ CAMU characteristics;

ii. ~~\_\_\_\_\_~~ volume of wastes which remain in place after closure;

iii. ~~\_\_\_\_\_~~ potential for releases from the CAMU;

iv. ~~physical and chemical characteristics of the waste;~~  
v. ~~hydrological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases; and~~  
vi. ~~potential for exposure of humans and environmental receptors if releases were to occur from the CAMU;~~

d. ~~post closure requirements as necessary to protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities shall be performed to ensure the integrity of any cap, final cover, or other containment system.~~

F. ~~The administrative authority shall document the rationale for designating CAMUs and shall make such documentation available to the public.~~

G. ~~Incorporation of a CAMU into an existing permit must be approved by the administrative authority according to the procedures for department-initiated permit modifications under LAC 33:V.323 or according to the permit modification procedures of LAC 33:V.321.~~

H. ~~The designation of a CAMU does not change the administrative authority's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.~~

A. Except as provided in Subsection B of this Section, CAMUs are subject to the requirements of LAC 33:V.2604.

B. CAMUs that were approved before April 22, 2002, or for which substantially complete applications (or equivalents) were submitted to the department on or before November 20, 2000, are subject to the requirements in LAC 33:V.2602 for grandfathered CAMUs. CAMU waste, activities, and design shall not be subject to the standards in LAC 33:V.2604, so long as the waste, activities, and design remain within the general scope of the CAMU as approved.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 21:266 (March 1995), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:285 (February 2000), LR 28:\*\*.

## **§2602. Grandfathered Corrective Action Management Units (CAMUs)**

A. To implement remedies under LAC 33:V.3322 or RCRA Section 3008(h), or to implement remedies at a permitted facility that is not subject to LAC 33:V.3322, the administrative authority may designate an area at the facility as a CAMU under the requirements in this Section. CAMU means an area within a facility that is used only for managing remediation wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

1. Placement of remediation wastes into or within a CAMU does not constitute land disposal of hazardous wastes.

2. Consolidation or placement of remediation wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

B. The administrative authority may designate a regulated unit (as defined in LAC 33:V.3301.B) as a CAMU, or may incorporate a regulated unit into a CAMU, under the following conditions.

1. The regulated unit is closed or closing, meaning it has begun the closure process under LAC 33:V.3513 or 4383.

2. Inclusion of the regulated unit will enhance implementation of effective, protective, and reliable remedial actions for the facility.

3. The LAC 33:V.Chapters 33, 35, and 37 requirements and the unit-specific requirements of Chapters 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 43 that applied to that regulated unit shall continue to apply to that portion of the CAMU after incorporation into the CAMU.

C. The administrative authority shall designate a CAMU in accordance with the following.

1. The CAMU shall facilitate the implementation of reliable, effective, protective, and cost-effective remedies.

2. Waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents.

3. The CAMU shall include uncontaminated areas of the facility only if including such areas for the purpose of managing remediation waste is more protective than management of such wastes at contaminated areas of the facility.

4. Areas within the CAMU where wastes remain in place after closure of the CAMU shall be managed and contained so as to minimize future releases, to the extent practicable.

5. The CAMU shall expedite the timing of remedial activity implementation, when appropriate and practicable.

6. The CAMU shall enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU.

7. The CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

D. The owner/operator shall provide sufficient information to enable the administrative authority to designate a CAMU in accordance with the criteria in LAC 33:V.2603.

E. The administrative authority shall specify, in the permit or order, requirements for CAMUs, which include the following.

1. The areal configuration of the CAMU shall be provided.

2. Requirements for remediation waste management shall include the specification of applicable design, operation, and closure requirements.

3. Requirements for groundwater monitoring shall be sufficient to:

a. continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in groundwater from sources located within the CAMU; and

b. detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU.

4. Closure and post-closure requirements shall include the following:

a. closure of CAMUs, which shall:

i. minimize the need for further maintenance; and

ii. control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere;

b. requirements for closure of CAMUs that shall include the following, as appropriate and as deemed necessary by the administrative authority, for a given CAMU:

i. requirements for excavation, removal, treatment, or containment of wastes;

ii. for areas in which wastes will remain after closure of the CAMU, requirements for capping of such areas; and

iii. requirements for removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU;

c. in establishing specific closure requirements for CAMUs under LAC 33:V.2603.E, the administrative authority shall consider the following factors:

i. CAMU characteristics;

ii. volume of wastes that remain in place after closure;

iii. potential for releases from the CAMU;

iv. physical and chemical characteristics of the waste;

v. hydrological and other relevant environmental conditions at the facility that may influence the migration of any potential or actual releases; and

vi. potential for exposure of humans and environmental receptors if releases were to occur from the CAMU; and

d. post-closure requirements, as necessary to protect human health and the environment, including for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities shall be performed, to ensure the integrity of any cap, final cover, or other containment system.

F. The administrative authority shall document the rationale for designating CAMUs and shall make such documentation available to the public.

G. Incorporation of a CAMU into an existing permit must be approved by the administrative authority according to the procedures for department-initiated permit modifications under LAC 33:V.323 or according to the permit modification procedures of LAC 33:V.321.C.



H. The designation of a CAMU does not change EPA's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:\*\*.

[Editor's Note: The previous §2603.Temporary Units (TU), has been changed to §2604. The text remains the same.]

### **§2603. Corrective Action Management Units (CAMUs)**

A. To implement remedies under LAC 33:V.3322 or RCRA Section 3008(h), or to implement remedies at a permitted facility that is not subject to LAC 33:V.3322, the administrative authority may designate an area at the facility as a CAMU under the requirements in this Section. CAMU means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

1. Definition. CAMU-Eligible Waste—

a. all solid and hazardous wastes and all media (including groundwater, surface water, soils, and sediments) and debris that are managed for implementing cleanup. As-generated wastes (either hazardous or nonhazardous) from ongoing industrial operations at a site are not CAMU-eligible wastes;

b. wastes that would otherwise meet the description in Subparagraph A.1.a of this Section are not CAMU-eligible wastes when:

i. the wastes are hazardous wastes found during cleanup in intact or substantially intact containers, tanks, or other non-land-based units found above ground, unless the wastes are first placed in the tanks, containers, or non-land-based units as part of cleanup or the containers or tanks are excavated during the course of cleanup; or

ii. the administrative authority exercises the discretion in Paragraph A.2 of this Section to prohibit the wastes from management in a CAMU; and

c. notwithstanding Subparagraph A.1.a of this Section, when appropriate, as-generated nonhazardous waste may be placed in a CAMU when such waste is being used to facilitate treatment or the performance of the CAMU.

2. The administrative authority may prohibit, where appropriate, the placement of waste in a CAMU when the administrative authority has or receives information that such wastes have not been managed in compliance with applicable land disposal treatment standards of LAC 33.V.Chapter 22, applicable unit design requirements of Chapters 5, 18, 19, 21, 23, 24, 25, 27, 28, 29, 32, and 35, or applicable unit design requirements of Chapter 43 or that noncompliance with other applicable requirements of this Chapter likely contributed to the release of the waste.

3. Prohibition Against Placing Liquids in CAMUs

a. The placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not sorbents have been added) in any CAMU is prohibited except when placement of such wastes facilitates the remedy selected for the waste.

b. The requirements in LAC 33:V.2515.C for placement of containers holding free liquids in landfills apply to placement in a CAMU except when placement facilitates the remedy selected for the waste.

c. The placement of any liquid that is not a hazardous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made in accordance with LAC 33:V.2515.F.

d. The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with LAC 33:V.2515.D. Sorbents used to treat free liquids in CAMUs must meet the requirements of LAC 33:V.2515.F.

4. Placement of CAMU-eligible wastes into or within a CAMU does not constitute land disposal of hazardous wastes.

5. Consolidation or placement of CAMU-eligible wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

B. The administrative authority may designate a regulated unit (as defined in LAC 33:V.3301.B) as a CAMU or may incorporate a regulated unit into a CAMU under the following conditions.

1. The regulated unit is closed or closing, meaning it has begun the closure process under LAC 33:V.3513 or 4383.

2. Inclusion of the regulated unit will enhance implementation of effective, protective, and reliable remedial actions for the facility.

3. The LAC 33:V.Chapters 33, 35, and 37 requirements and the unit-specific requirements of Chapters 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 43 that applied to the regulated unit shall continue to apply to that portion of the CAMU after incorporation into the CAMU.

C. The administrative authority shall designate a CAMU that will be used for storage and/or treatment only in accordance with Subsection F of this Section. The administrative authority shall designate all other CAMUs in accordance with the following.

1. The CAMU shall facilitate the implementation of reliable, effective, protective, and cost-effective remedies.

2. Waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents.

3. The CAMU shall include uncontaminated areas of the facility, only if including such areas for the purpose of managing CAMU-eligible waste is more protective than management of such wastes at contaminated areas of the facility.

4. Areas within the CAMU where wastes remain in place after closure of the CAMU shall be managed and contained so as to minimize future releases, to the extent practicable.

5. The CAMU shall expedite the timing of remedial activity implementation, when appropriate and practicable.

6. The CAMU shall enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU.

7. The CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.

D. The owner/operator shall provide sufficient information to enable the administrative authority to designate a CAMU in accordance with the criteria in this Section. This must include, unless not reasonably available, information on:

1. the origin of the waste and how it was subsequently managed (including a description of the timing and circumstances surrounding the disposal and/or release);

2. whether the waste was listed or identified as hazardous at the time of disposal and/or release; and

3. whether the disposal and/or release of the waste occurred before or after the land disposal requirements of LAC 33:V.Chapter 22 were in effect for the waste listing or characteristic.

E. The administrative authority shall specify, in the permit or order, requirements for CAMUs, which include the following.

1. The areal configuration of the CAMU shall be provided.

2. Except as provided in Subsection G of this Section, requirements for CAMU-eligible waste management shall include the specification of applicable design, operation, treatment, and closure requirements.

3. Minimum Design Requirements. CAMUs, except as provided in Subsection F of this Section, into which wastes are placed must be designed in accordance with the following.

a. Unless the administrative authority approves alternate requirements under Subparagraph E.3.b of this Section, CAMUs that consist of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30 cm depth of leachate over the liner. For purposes of this Section, *composite liner* means a system consisting of two components: the upper component must consist of a minimum 30 mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component.

b. Alternate Requirements. The administrative authority may approve alternate requirements if:

i. the administrative authority finds that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the groundwater or surface water at least as effectively as the liner and leachate collection systems in Subparagraph E.3.a of this Section; or

ii. the CAMU is to be established in an area with existing significant levels of contamination, and the administrative authority finds that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.

4. Minimum Treatment Requirements. Unless the wastes will be placed in a CAMU for storage and/or treatment only in accordance with Subsection F of this Section, CAMU-eligible wastes that, absent this Section, would be subject to the treatment requirements of LAC 33:V.Chapter 22 and that the administrative authority determines contain principal hazardous constituents must be treated to the standards specified in Subparagraph E.4.c of this Section.

a. Principal hazardous constituents are those constituents that the administrative authority determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.

i. In general, the administrative authority will designate as principal hazardous constituents:

(a). carcinogens that pose a potential direct risk from ingestion or inhalation, at the site, at or above  $10^{-3}$  risk level; and

(b). non-carcinogens that pose a potential direct risk from ingestion or inhalation, at the site, an order of magnitude or greater over their reference dose.

ii. The administrative authority will also designate constituents as principal hazardous constituents, when appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to groundwater are substantially higher than cleanup levels or goals at the site. When making such a designation, the administrative authority may consider such factors as constituent concentrations and fate and transport characteristics under site conditions.

b. In determining which constituents are principal hazardous constituents, the administrative authority must consider all constituents that, absent this Section, would be subject to the treatment requirements in LAC 33:V.Chapter 22.

c. Waste that the administrative authority determines contains principal hazardous constituents must meet treatment standards determined in accordance with Subparagraph E.4.d or e of this Section.

d. Treatment Standards for Wastes Placed in CAMUs

i. For non-metals, treatment must achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by Clause E.4.d.iii of this Section.

ii. For metals, treatment must achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by Clause E.4.d.iii of this Section.

iii. When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than

10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in LAC 33:V.Chapter 22, Table 7.

iv. For waste exhibiting the hazardous characteristic of ignitability, corrosivity, or reactivity, the waste must also be treated to eliminate these characteristics.

v. For debris, the debris must be treated in accordance with LAC 33:V.2230 or by methods described in or to levels established under Clauses E.4.d.i - iv or Subparagraph E.4.e of this Section, whichever the administrative authority determines is appropriate.

vi. Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the administrative authority may specify a leaching test other than the TCLP (Method 1311, EPA Publication SW-846, as incorporated by reference in LAC 33:V.110.A.11) to measure treatment effectiveness, provided the administrative authority determines that an alternative leach testing protocol is appropriate for use and that the alternative more accurately reflects conditions at the site that affect leaching.

e. Adjusted Standards. The administrative authority may adjust the treatment level or method in Subparagraph E.4.d of this Section to a higher or lower level, based on one or more of the following factors, as appropriate. The adjusted level or method must be protective of human health and the environment:

i. the technical impracticability of treatment to the levels or by the methods in Subparagraph E.4.d of this Section;

ii. the levels or methods in Subparagraph E.4.d of this Section would result in concentrations of principal hazardous constituents that are significantly above or below cleanup standards applicable to the site (established either site-specifically or promulgated under state or federal law);

iii. the views of the affected local community on the treatment levels or methods in Subparagraph E.4.d of this Section, as applied at the site, and for treatment levels, the treatment methods necessary to achieve these levels;

iv. the short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in Subparagraph E.4.d of this Section; and

v. the long-term protection offered by the engineering design of the CAMU and related engineering controls:

(a) when the treatment standards in Subparagraph E.4.d of this Section are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility;

(b) when cost-effective treatment has been used and the CAMU meets the RCRA Subtitle C liner and leachate collection requirements for new land disposal units at LAC 33:V.2503.L and M;

(c) when, after review of appropriate treatment technologies, the administrative authority determines that cost-effective treatment is not reasonably available, and the CAMU meets the RCRA Subtitle C liner and leachate collection requirements for new land disposal units at LAC 33:V.2503.L and M;

(d). when cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or

(e). when, after review of appropriate treatment technologies, the administrative authority determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or laterally expanded CAMUs in Subparagraphs E.3.a and b of this Section or the CAMU provides substantially equivalent or greater protection.

f. The treatment required by the treatment standards must be completed prior to, or within a reasonable time after, placement in the CAMU.

g. For the purpose of determining whether wastes placed in CAMUs have met site-specific treatment standards, the administrative authority may, as appropriate, specify a subset of the principal hazardous constituents in the waste as analytical surrogates for determining whether treatment standards have been met for other principal hazardous constituents. This specification will be based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.

5. Except as provided in Subsection F of this Section, CAMUs shall have requirements for groundwater monitoring and corrective action that are sufficient to:

a. continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in groundwater from sources located within the CAMU;

b. detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU; and

c. provide notification to the administrative authority and corrective action as necessary to protect human health and the environment from releases to groundwater from the CAMU.

6. Except as provided in Subsection F of this Section, CAMUs shall have the following closure and post-closure requirements:

a. closure of CAMUs, which shall:

i. minimize the need for further maintenance; and

ii. control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere;

b. requirements for closure of CAMUs that shall include the following, as appropriate and as deemed necessary by the administrative authority, for a given CAMU:

i. requirements for excavation, removal, treatment, or containment of wastes; and

ii. requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU;

c. in establishing specific closure requirements for CAMUs under this Subsection, the administrative authority shall consider the following factors:

- i. CAMU characteristics;
- ii. volume of wastes that remain in place after closure;
- iii. potential for releases from the CAMU;
- iv. physical and chemical characteristics of the waste;
- v. hydrological and other relevant environmental conditions at the facility that may influence the migration of any potential or actual releases; and
- vi. potential for exposure of humans and environmental receptors if releases were to occur from the CAMU;

d. cap requirements, as follows:

i. at final closure of the CAMU, for areas in which wastes will remain after closure of the CAMU, with constituent concentrations at or above remedial levels or goals applicable to the site, the owner or operator must cover the CAMU with a final cover designed and constructed to meet the following performance criteria, except as provided in Clause E.6.d.ii of this Section:

- (a). provide long-term minimization of migration of liquids through the closed unit;
- (b). function with minimum maintenance;
- (c). promote drainage and minimize erosion or abrasion of the cover;
- (d). accommodate settling and subsidence so that the cover's integrity is maintained; and
- (e). have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present; and
- ii. the administrative authority may determine that modifications to Clause E.6.d.i of this Section are needed to facilitate treatment or the performance of the CAMU (e.g., to promote biodegradation); and

e. post-closure requirements as necessary to protect human health and the environment and to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities shall be performed, to ensure the integrity of any cap, final cover, or other containment system.

F. CAMUs used for storage and/or treatment only are CAMUs in which wastes will not remain after closure. Such CAMUs must be designated in accordance with all of the requirements of this Section, except as follows.

1. CAMUs that are used for storage and/or treatment only and that operate in accordance with the time limits established in the staging pile regulations at LAC 33:V.2605.D.1.c, H, and I are subject to the requirements for staging piles at LAC 33:V.2605.D.1.a and b and 2, E, F, J, and K in lieu of the performance standards and requirements for CAMUs in Subsection C and Paragraphs E.3 - 6 of this Section.

2. CAMUs that are used for storage and/or treatment only and that do not operate in accordance with the time limits established in the staging pile regulations at LAC 33:V.2605.D.1.c, H, and I:

a. \_\_\_\_\_ must operate in accordance with a time limit, established by the administrative authority, that is no longer than necessary to achieve a timely remedy selected for the waste; and

b. \_\_\_\_\_ are subject to the requirements for staging piles at LAC 33:V.2605.D.1.a and b and 2, E, F, J, and K in lieu of the performance standards and requirements for CAMUs in Subsection C and Paragraphs E.4 and 6 of this Section.

G. \_\_\_\_\_ CAMUs into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at Subparagraph E.3.a of this Section, requirements for caps at Subparagraph E.6.d of this Section, groundwater monitoring requirements at Paragraph E.5 of this Section or, for treatment and/or storage-only CAMUs, the design standards at Subsection F of this Section.

H. \_\_\_\_\_ The administrative authority shall provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such notice shall include the rationale for any proposed adjustments under Subparagraph E.4.e of this Section to the treatment standards in Subparagraph E.4.d of this Section.

I. \_\_\_\_\_ Notwithstanding any other provision of this Section, the administrative authority may impose additional requirements as necessary to protect human health and the environment.

J. \_\_\_\_\_ Incorporation of a CAMU into an existing permit must be approved by the administrative authority according to the procedures for department-initiated permit modifications under LAC 33:V.323 or according to the permit modification procedures of LAC 33:V.321.C.

K. \_\_\_\_\_ The designation of a CAMU does not change EPA's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:\*\*.

## **§2605. Staging Piles**

[NOTE: This Section is written in a special format to make it easier to understand the regulatory requirements. Like other department and USEPA regulations, this establishes enforceable legal requirements. For this Section, *I* and *you* refer to the owner/operator.]

A. What Is a Staging Pile? A staging pile is an accumulation of solid, non-flowing remediation waste (as defined in LAC 33:V.109) that is not a containment building and is used only during remedial operations for temporary storage at a facility. A staging pile must be located within the contiguous property under the control of the owner/operator where the wastes to be managed in the staging pile originated. Staging piles must be designated by the administrative authority according to the requirements in this Section. For the purposes of this Section, storage includes mixing, sizing, blending, or other similar physical operations as long as they are intended to prepare the wastes for subsequent management or treatment.

B. – M. ...



AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 26:285 (February 2000), amended LR 28:\*\*.

## **2607. Disposal of CAMU-Eligible Wastes in Permitted Hazardous Waste Landfills**

A. The administrative authority with regulatory oversight at the location where the cleanup is taking place may approve placement of CAMU-eligible wastes in hazardous waste landfills not located at the site from which the waste originated, without the wastes meeting the requirements of LAC 33:V.Chapter 22, if the conditions in Paragraphs A.1-3 of this Section are met.

1. The waste must meet the definition of CAMU-eligible waste in LAC 33:V.2603.A.1.

2. The administrative authority with regulatory oversight at the location where the cleanup is taking place shall identify principal hazardous constituents in such waste, in accordance with LAC 33:V.2603.E.4.a and b, and require that such principal hazardous constituents are treated to any of the following standards specified for CAMU-eligible wastes:

a. the treatment standards under LAC 33:V.2603.E.4.d;

b. treatment standards adjusted in accordance with LAC 33:V.2603.E.4.e.i, iii, iv, or v.(a); or

c. treatment standards adjusted in accordance with LAC 33:V.2603.E.4.e.v.(b) when treatment has been used and that treatment significantly reduces the toxicity or mobility of the principal hazardous constituents in the waste, minimizing the short-term and long-term threat posed by the waste, including the threat at the remediation site.

3. The landfill receiving the CAMU-eligible waste must have a RCRA hazardous waste permit, meet the requirements for new landfills in LAC 33:V.Chapter 25, and be authorized to accept CAMU-eligible wastes. For the purposes of this requirement, "permit" does not include interim status.

B. The person seeking approval shall provide sufficient information to enable the administrative authority with regulatory oversight at the location where the cleanup is taking place to approve placement of CAMU-eligible waste in accordance with Subsection A of this Section. Information required by LAC 33:V.2603.D.1-3 for CAMU applications must be provided, unless it is not reasonably available.

C. The administrative authority with regulatory oversight at the location where the cleanup is taking place shall provide public notice and a reasonable opportunity for public comment before approving CAMU-eligible waste for placement in an off-site permitted hazardous waste landfill, consistent with the requirements for CAMU approval at LAC 33:V.2603.H. The approval must be specific to a single remediation.

D. Applicable hazardous waste management requirements in LAC 33:V. Chapters 5, 18, 19, 21, 23, 24, 25, 27, 28, 29, 32, and 35, including recordkeeping requirements to demonstrate compliance with treatment standards approved under this Section, for CAMU-eligible waste must be incorporated into the receiving facility permit through permit issuance or a

permit modification, providing notice and an opportunity for comment and a hearing. Notwithstanding LAC 33:V.307.A, a landfill may not receive hazardous CAMU-eligible waste under this Section unless its permit specifically authorizes receipt of such waste.

E. For each remediation, CAMU-eligible waste may not be placed in an off-site landfill authorized to receive CAMU-eligible waste in accordance with Subsection D of this Section until the following additional conditions have been met.

1. The landfill owner/operator shall notify the administrative authority responsible for oversight of the landfill and persons on the facility mailing list, maintained in accordance with LAC 33:V.717.A.5, of his or her intent to receive CAMU-eligible waste in accordance with this Section. The notice must identify the source of the remediation waste, the principal hazardous constituents in the waste, and treatment requirements.

2. Any comments from persons on the facility mailing list, including objections to the receipt of the CAMU-eligible waste, shall be provided to the administrative authority within 15 days of notification.

3. The administrative authority shall have the opportunity to object to the placement of the CAMU-eligible waste in the landfill for a period of 30 days after notification. The administrative authority may extend the review period an additional 30 days because of public concerns or insufficient information.

4. CAMU-eligible wastes shall not be placed in the landfill until the administrative authority has notified the facility owner/operator that he or she does not object to its placement.

5. If the administrative authority objects to the placement or does not notify the facility owner/operator that he or she has chosen not to object, the facility shall not receive the waste, notwithstanding LAC 33:V.307.A, until the objection has been resolved or the owner/operator obtains a permit modification in accordance with the procedures of LAC 33:V.321.C specifically authorizing receipt of the waste.

6. As part of the permit issuance or permit modification process of Paragraph D of this Section, the administrative authority may modify, reduce, or eliminate the notification requirements of this Subsection as they apply to specific categories of CAMU-eligible waste, based on minimal risk.

F. Generators of CAMU-eligible wastes sent off-site to a hazardous waste landfill under this Section must comply with the requirements of LAC 33:V.2245.D. Off-site facilities treating CAMU-eligible wastes to comply with this Section must comply with the requirements of LAC 33:V.2247.C, except that the certification must be with respect to the treatment requirements of Paragraph A.2 of this Section.

G. For the purposes of this Section only, the "design of the CAMU" in LAC 33:V.2603.E.4.e.v means design of the permitted RCRA Subtitle C landfill.

AUTHORITY NOTE:Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, Environmental Planning Division, LR 28:\*\*.